

31H2

TC-PB10

US Model
AEP Model
UK Model
E Model



STEREO CASSETTE PLAYER

SPECIFICATIONS

CASSETTE PLAYER

Playback System: 4-track 2-channel stereo

Fast-forward and
Rewind Time: Approx. 90 sec. (with C-60 cassette)

Playback Signal-to-noise Ratio:
With TYPE IV cassette (Sony METALLIC)
60 dB at peak level . . . US model
60 dB at peak level (NAB) } AEP, E, UK model
60 dB (DIN) }
Frequency Response:

- With TYPE IV cassette (Sony METALLIC)
20 – 18,000 Hz
30 – 16,000 Hz (± 3 dB)
- With TYPE I cassette (Sony HFX) . . . US model
(Sony BHF) . . . AEP, UK, E model
20 – 17,000 Hz
30 – 15,000 Hz (± 3 dB)

Wow and Flutter: 0.05 % WRMS . . . US model

0.05 % WRMS (NAB) } AEP, UK, E model
 ± 0.14 % (DIN) }

Tape Transport Mechanism Type TCM-110V5

Power Output: US model

12 W + 12 W (70 Hz – 20,000 Hz,

1 % harmonic distortion)

AEP, UK, E model

25 W + 25 W (Music)

50 W + 50 W (Peak music)

14 W + 14 W (1 kHz, 1 % harmonic distortion)

Harmonic Distortion: 0.05 % (4 W + 4 W)

Inputs: Microphone input (phone jack)

Sensitivity 0.435 mV (-65 dB)

For a low-impedance microphone

AUX IN

Sensitivity 435 mV (-5 dB)

Input impedance 5 k Ω

Outputs: Line outputs

Output level 250 mV (-10 dB) at load
impedance 50 k Ω

Load impedance over 10 k Ω

Headphone output

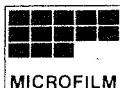
Output level 380 mV (-16 dB) at a load
impedance of 8 Ω with the volume level
maximum

— Continued on page 2 —

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK Δ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SONY
SERVICE MANUAL



MICROFILM

31H2

TC-PB10

GENERAL

Power Requirements: US model:
120 V ac, 60 Hz
AEP model:
220 V ac, 50/60 Hz
(240 V ac adjustable by authorized Sony personnel)
UK model:
240 V ac, 50/60 Hz
(220 V ac adjustable by authorized Sony personnel)
E model:
110, 120, 220 or 240 V ac adjustable,
50/60 Hz

Power Consumption: 45 W

Dimensions: Approx. 195 (w) x 255 (h) x 230 (d) mm
($7\frac{3}{4}$ (w) x $10\frac{7}{8}$ (h) x $9\frac{1}{8}$ (d) inches)
including projecting parts and controls

Weight: Approx. 5.9 kg (13 lb) net
Approx. 9.5 kg (21 lb) in shipping carton
including speakers weight

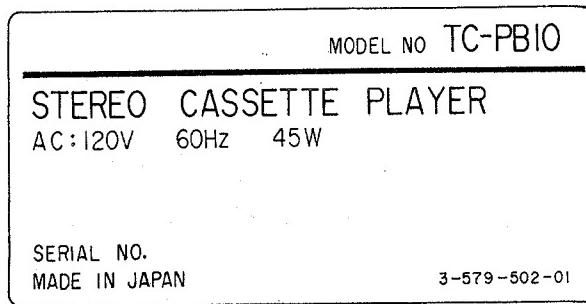
SPEAKER

Speaker System: 2-way speaker system
Speaker Units: Woofer: 10 cm, cone type
Tweeter: 5 cm, cone type
Nominal Impedance: 4 Ω
Power Handling Capacity: Nominal 20 W DIN 45500
Maximum 50 W DIN 45500
Sensitivity: 88 dB (1 W, 1 m) DIN 45500
Frequency Range: 60 Hz – 18,000 Hz $\frac{+4}{-8}$ dB DIN
Crossover Frequency: 7,000 Hz
Dimensions: Approx. 125 (w) x 255 (h) x 205 (d) mm
(5 (w) x $10\frac{7}{8}$ (h) x $8\frac{1}{8}$ (d) inches)

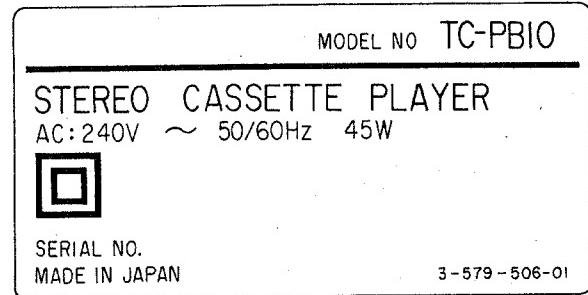
MODEL IDENTIFICATION

— Specification Label —

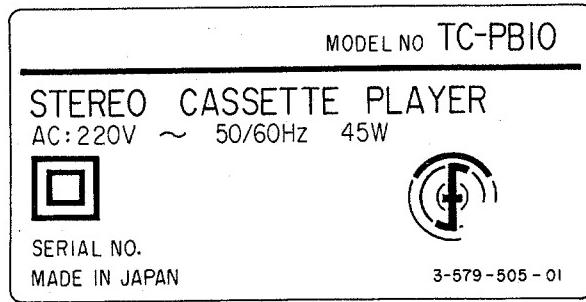
US Model



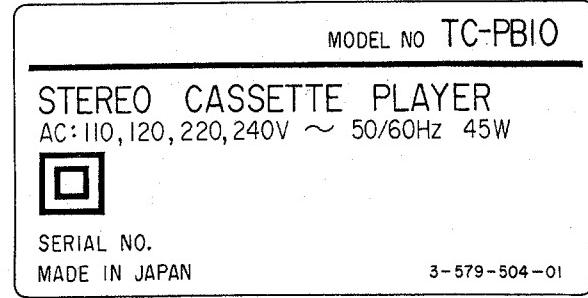
UK Model



AEP Model



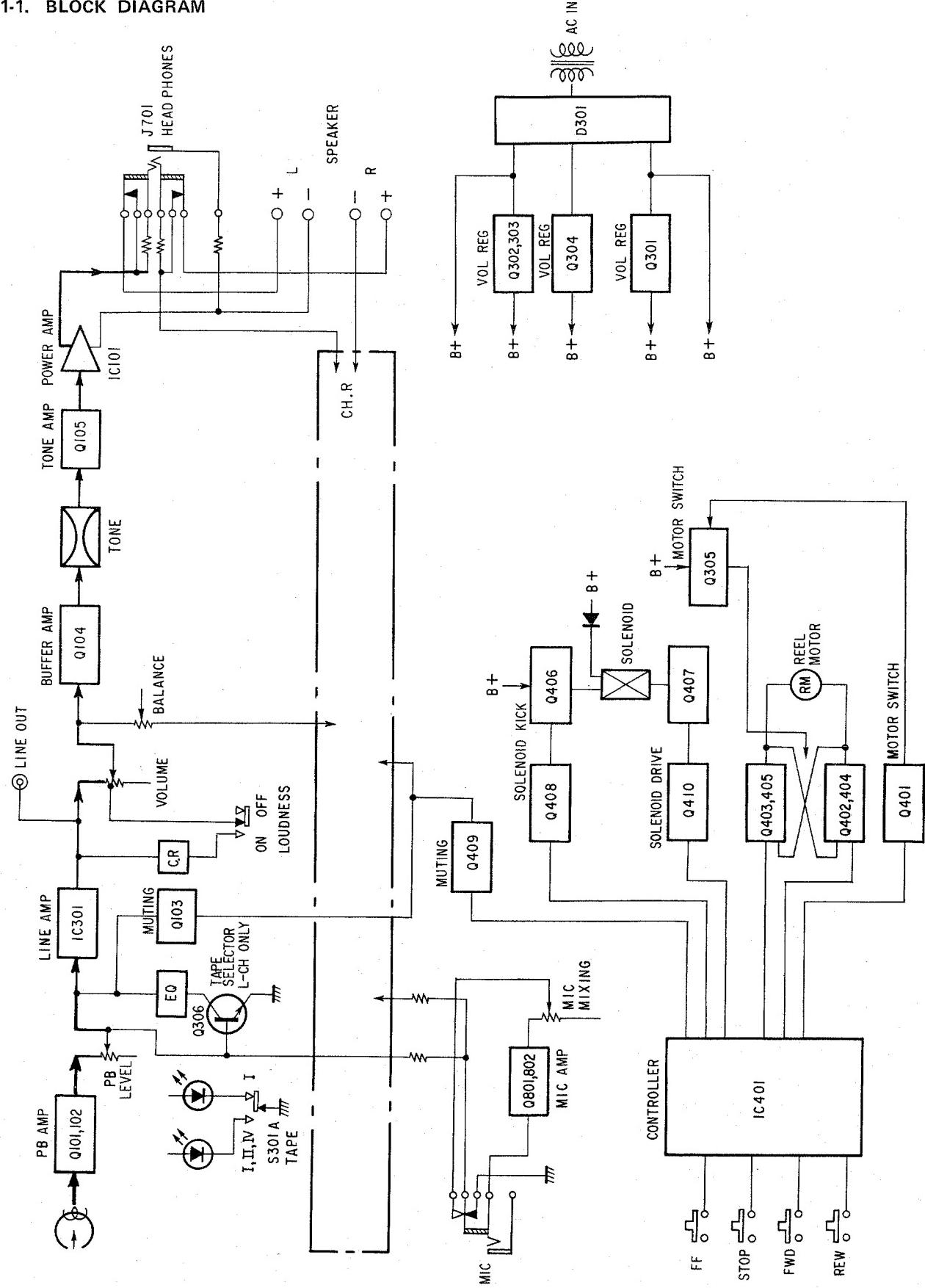
E Model



SECTION 1

OUTLINE

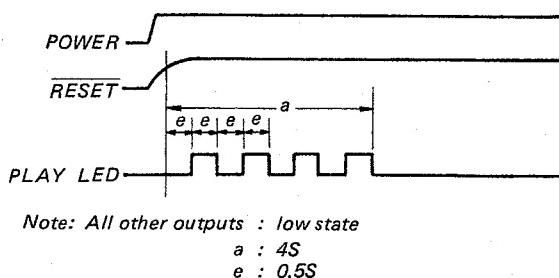
1-1. BLOCK DIAGRAM



1-2. CIRCUIT DESCRIPTION

- When the POWER is Turned ON:

For four seconds after the POWER switch is turned ON (i.e., after RESET input signal became in "H"), the PLAY LED repeats going on and off in one-second repetition rate. The reset signal is effective during this four second period and the function-switch inputs are rejected, i.e., the set is in the stop mode.



IC401's TERMINAL NAME, WAVEFORM AND/OR VOLTAGES			
PIN No.	WAVEFORM AND/OR VOLTAGES	PIN No.	WAVEFORM AND/OR VOLTAGES
②	PLAY lamp drive 1 playback mode: DC 4.5V stop mode: DC 0V	⑪	Auto Shut-Off Signal DC 4.5V 0V tape end 0.2sec 2sec auto shut-off becomes in stop mode at tape end in forward mode (may become in 0V according to the position of take-up reel spindle)
③	PLAY lamp drive 2 pause mode: DC 4.5V stop mode: DC 0V	⑫	AMS-Solenoid Drive Signal DC 4.5V 0V 0.25sec forward switch ON stop mode: DC 0V
④	■ switch input (STOP) stop button kept pressed stop mode: DC 0V	⑬	Clock Signal DC 1.6V 1Vp-p 6msec
⑤	◀ switch input (REWIND) rewind button kept pressed stop mode: DC 4V	⑭	GND (ground)
⑥	▶▶ switch input (FF) fast-forward button kept pressed stop mode: DC 0V	⑮	Reset Signal (RESET) DC 4V
⑦	▶ switch input (FWD) forward button kept pressed	⑯	Line-Muting Signal DC 4.5V DC 0.4V forward switch ON stop
		⑰	Reel-Motor Drive Signal in Forward Mode DC 4.8V 0V forward switch ON stop mode: DC 0V
		⑱	Reel-Motor Drive Signal in Fast-Forward Mode DC 4.5V 0V fast-forward mode: DC 4.5V forward mode: DC 0.3V stop mode: DC 0V
		⑲	Reel-Motor Drive Signal in Rewind Mode DC 4.8V 0V rewind mode: DC 4.8V stop mode: DC 0V
		⑳	B+ Supply Voltage 4.5V

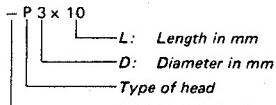
Note: A terminal with bar over its name operates when 0V voltage is applied.
ex: RESET

1/4 WATT CARBON RESISTORS

Ω	Part No.												
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-476-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-477-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-478-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-479-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-480-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-481-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-482-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-483-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-484-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-485-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-486-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-487-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

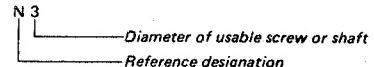
HARDWARE NOMENCLATURE

Screw:



Unless otherwise indicated, it means cross-recessed head (Phillips type).

Nut, Washer, Retaining ring:



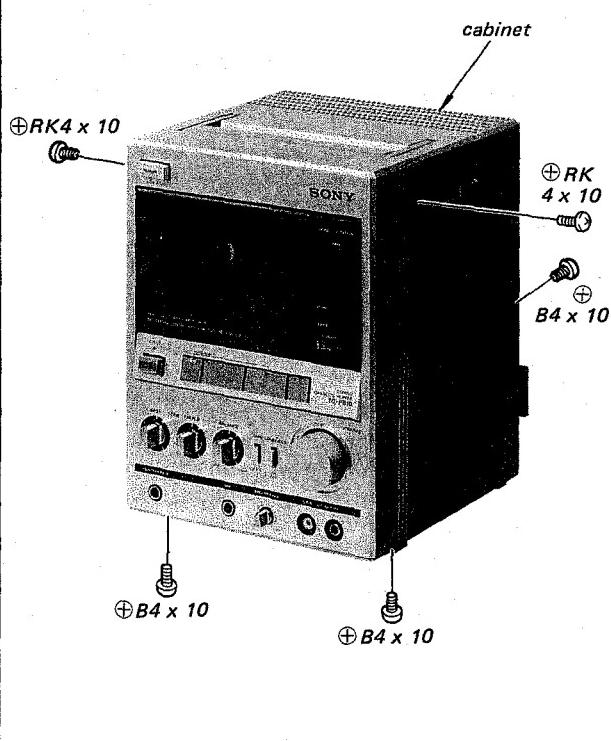
Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self-tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

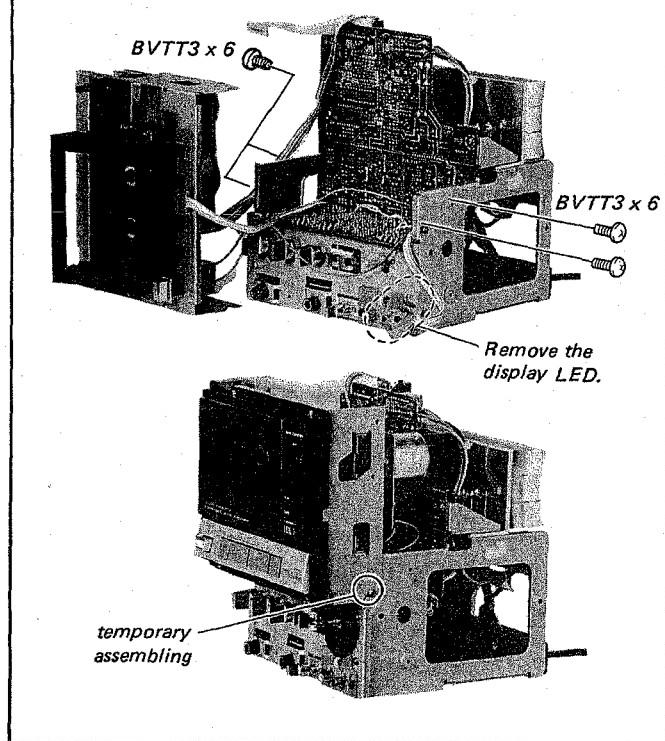
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

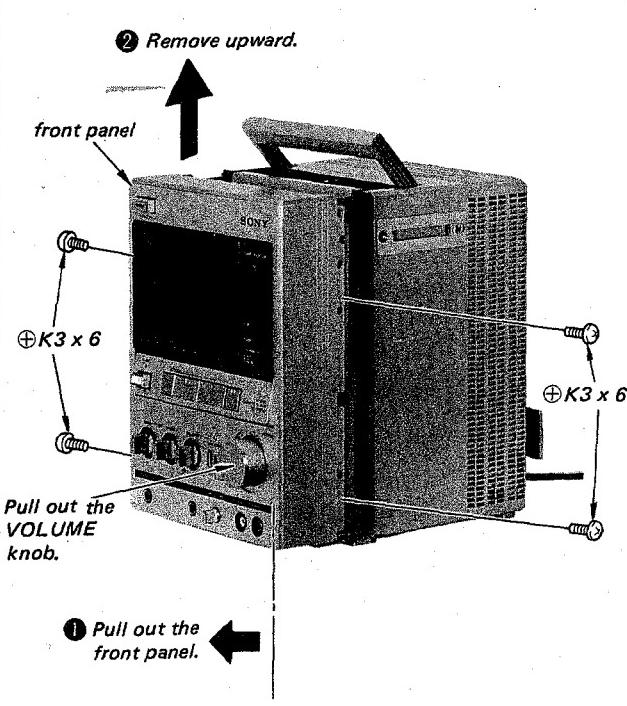
CABINET



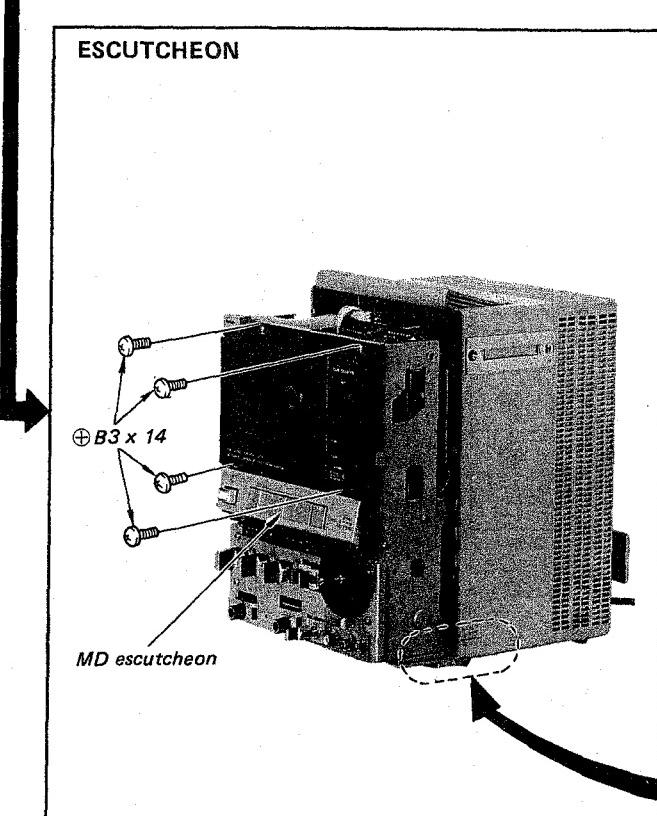
MECHANISM DISASSEMBLY/TEMPORARY ASSEMBLY



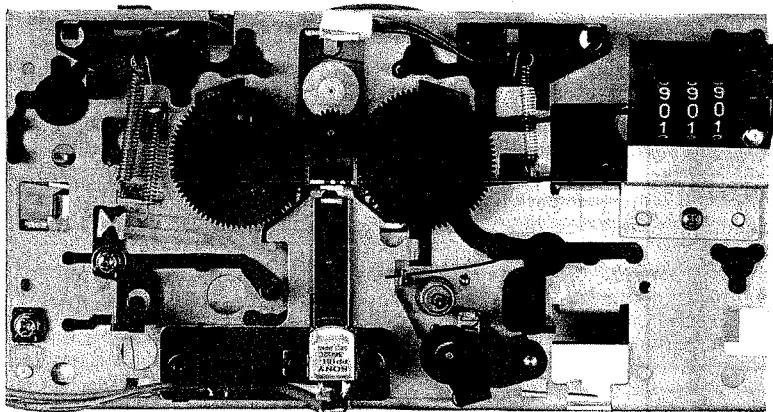
FRONT PANEL



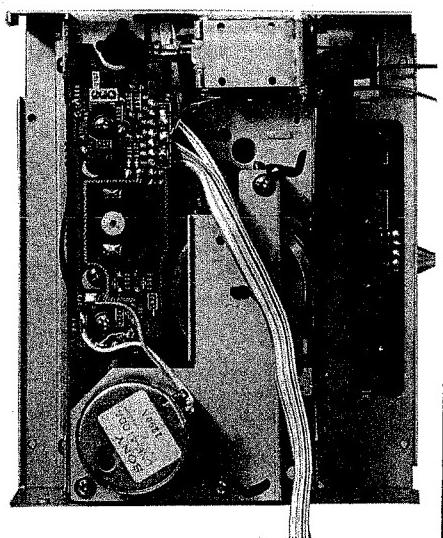
ESCUTCHEON



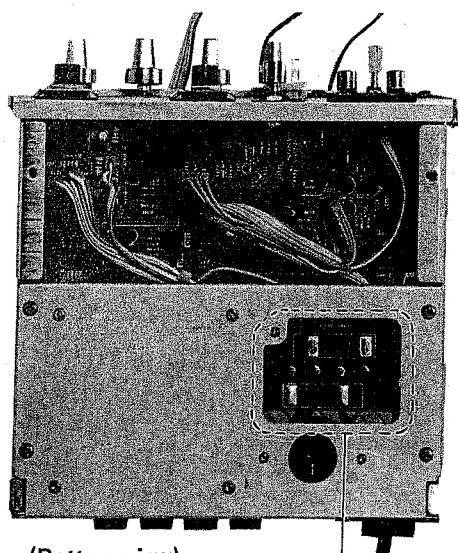
MECHANISM SECTION (Front view)



MECHANISM DECK SECTION



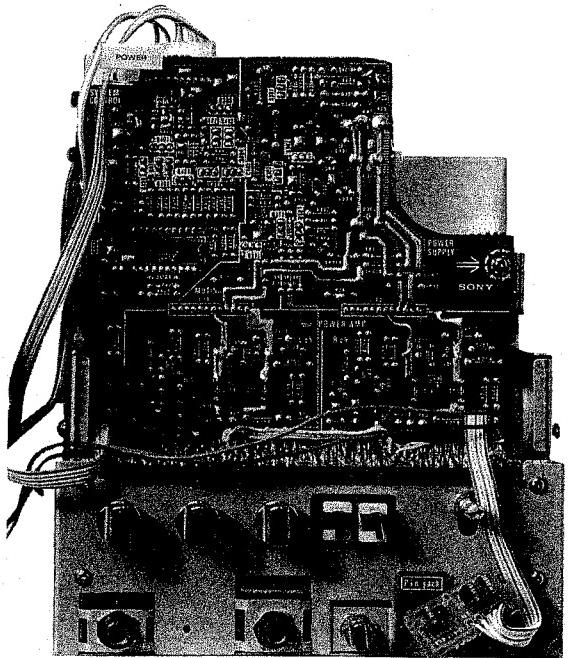
AC IN PRIMARY SIDE



(Bottom view)

*To avoid electrical shock,
do not touch.*

AMPLIFIER SECTION



SECTION 3 ADJUSTMENTS

3-1. MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:

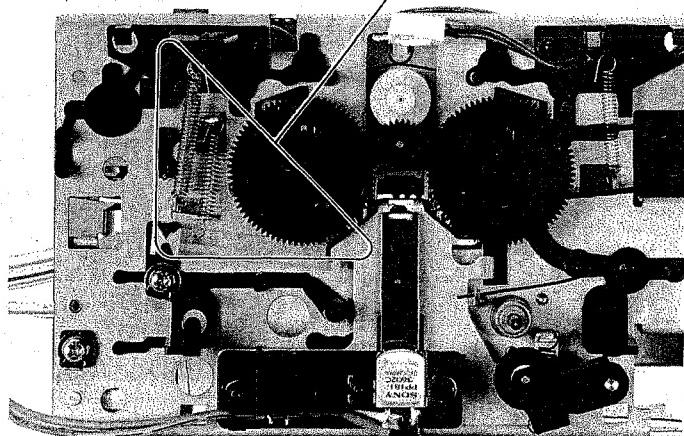
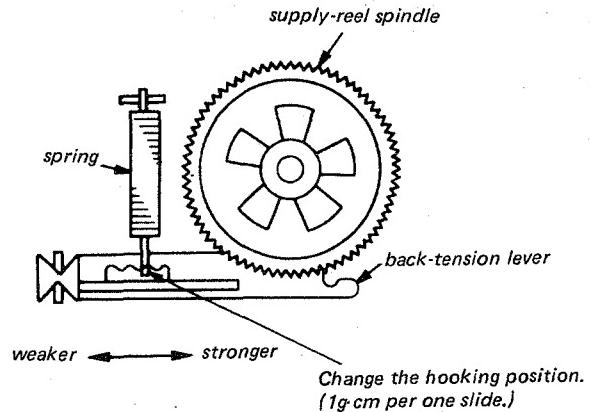
record/playback head	pinch roller
erase head	rubber belts
capstan	idle
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement and Back Tension

Torque Adjustment

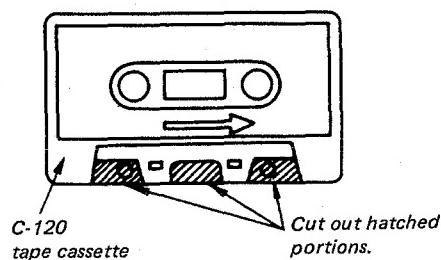
1.	Torque	Torque meter	Meter reading
	Forward	CQ-102C	30–60 g·cm (0.42–0.83 oz·inch)
	Fast forward, Rewind	CQ-201A	110–165 g·cm (1.53–2.2 oz·inch)
	Back tension	CQ-102C	2.5–4.5 g·cm (0.04–0.06 oz·inch)

2. If the specified back-tension torque is not obtained, change the hooking position of the spring.

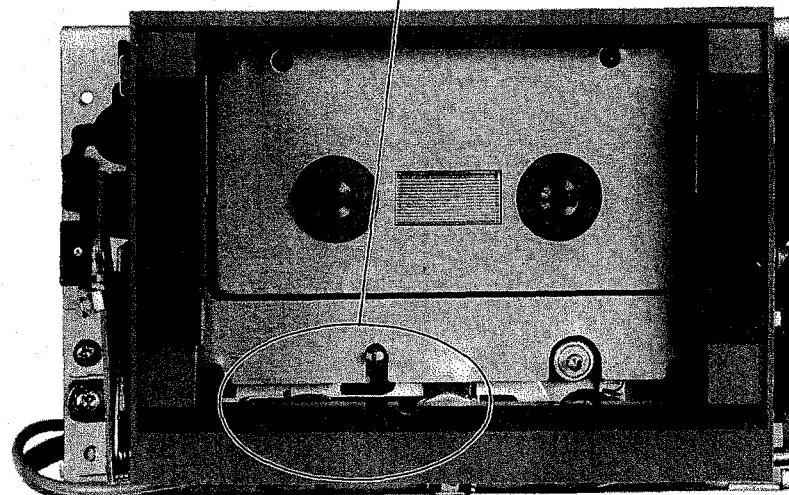
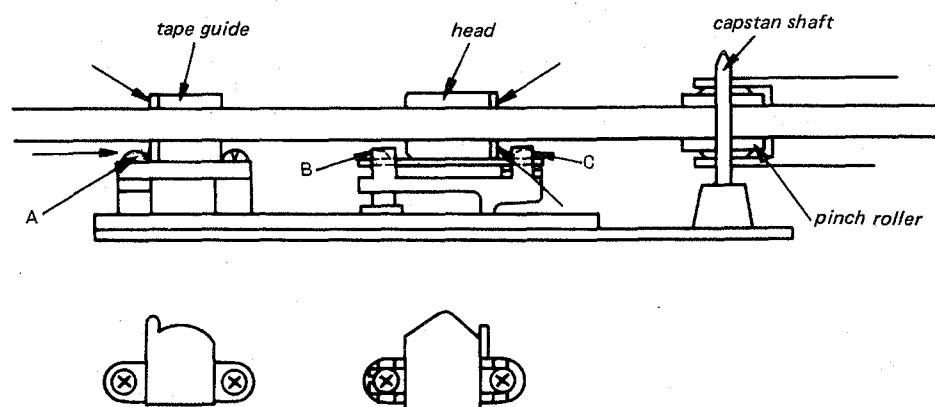


Head Height Adjustment

1. Prepare an adjustment cassette as shown below.



2. In playback mode and viewing from the front, adjust the head heights by using the adjustment screw A, B, C, to eliminate tape curl and tape twist at portions shown by arrow.



3-2. ELECTRICAL ADJUSTMENTS

Note: The adjustment should be performed in the order given in this service manual. The adjustments should be performed for both L-CH and R-CH.

- Set the TAPE switches according to the tape as follows.

Tape	TAPE switch
CS-10	TYPE I
CS-20	TYPE II
CS-30	TYPE III
CS-40	TYPE IV

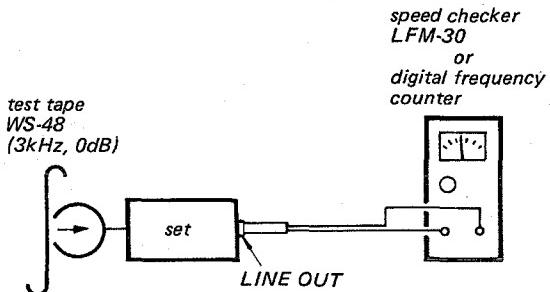
- Switches and controls should be set as follows unless otherwise specified.

Standard Output Level

	PHONES	LINE OUT
load impedance	8Ω	47kΩ
output level	39mV (-26dB)	0.44V (-5dB)

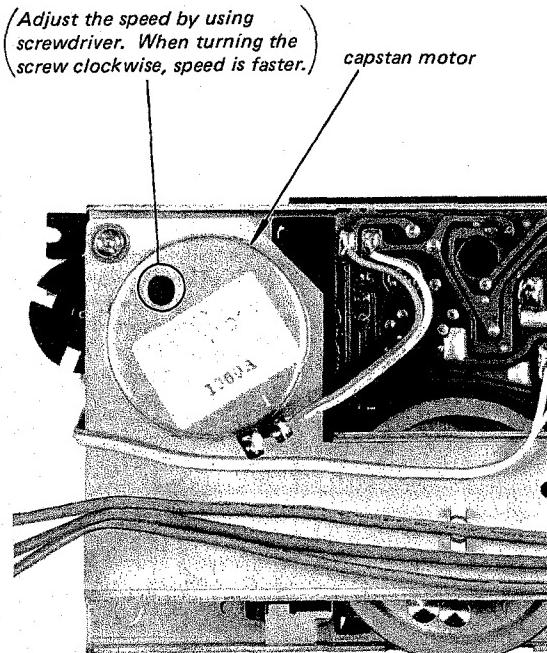
Capstan Motor Speed Adjustment**Procedure:**

Mode: playback

**Specification:**

Speed checker	Digital frequency counter
-0.3 ~ +0.3%	2,990 ~ 3,010Hz

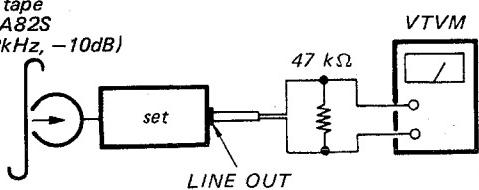
Frequency difference between the beginning and the end of the tape should be within 1% (30Hz).

Adjustment Location:

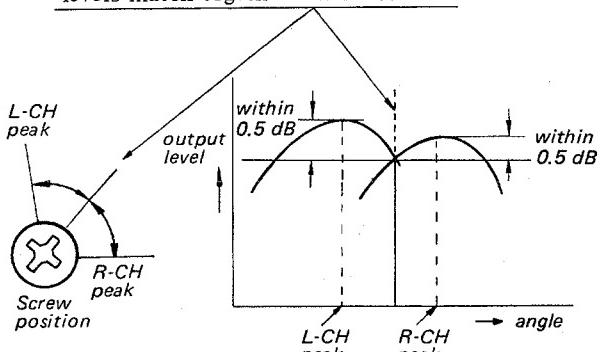
Record/playback Head Azimuth Adjustment**Procedure:**

- Mode: playback

*test tape
P-4-A82S
(6.2kHz, -10dB)*



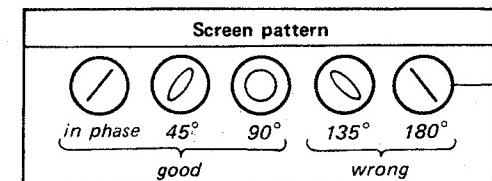
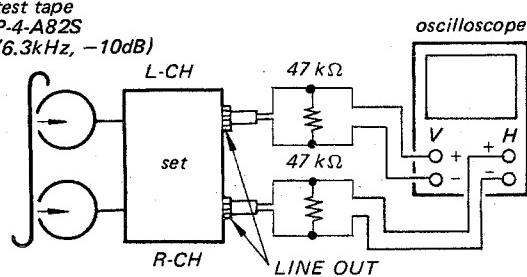
- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw where both of output levels match together within 0.5 dB.



- Phase Check

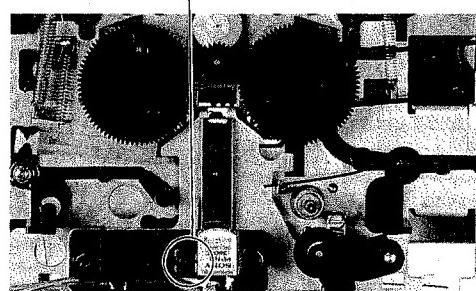
Mode: playback

*test tape
P-4-A82S
(6.3kHz, -10dB)*



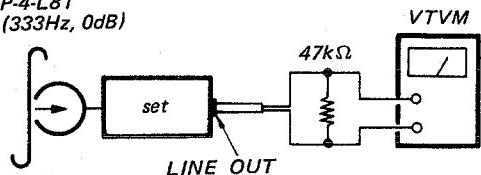
Adjustment Location:

adjustment screw

**Playback Level Adjustment****Procedure:**

Mode: playback

*test tape
P-4-L81
(333Hz, 0dB)*

**Specification:**

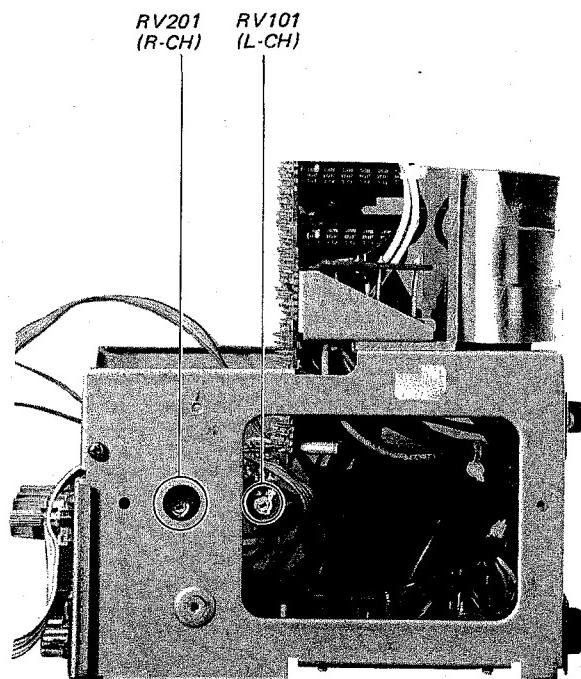
LINE OUT level: $0.52 \sim 0.59V$
 $(-3.5 \sim -2.5dB)$

Level difference between channels:
less than 0.5dB

Check that the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

Adjustment Location:

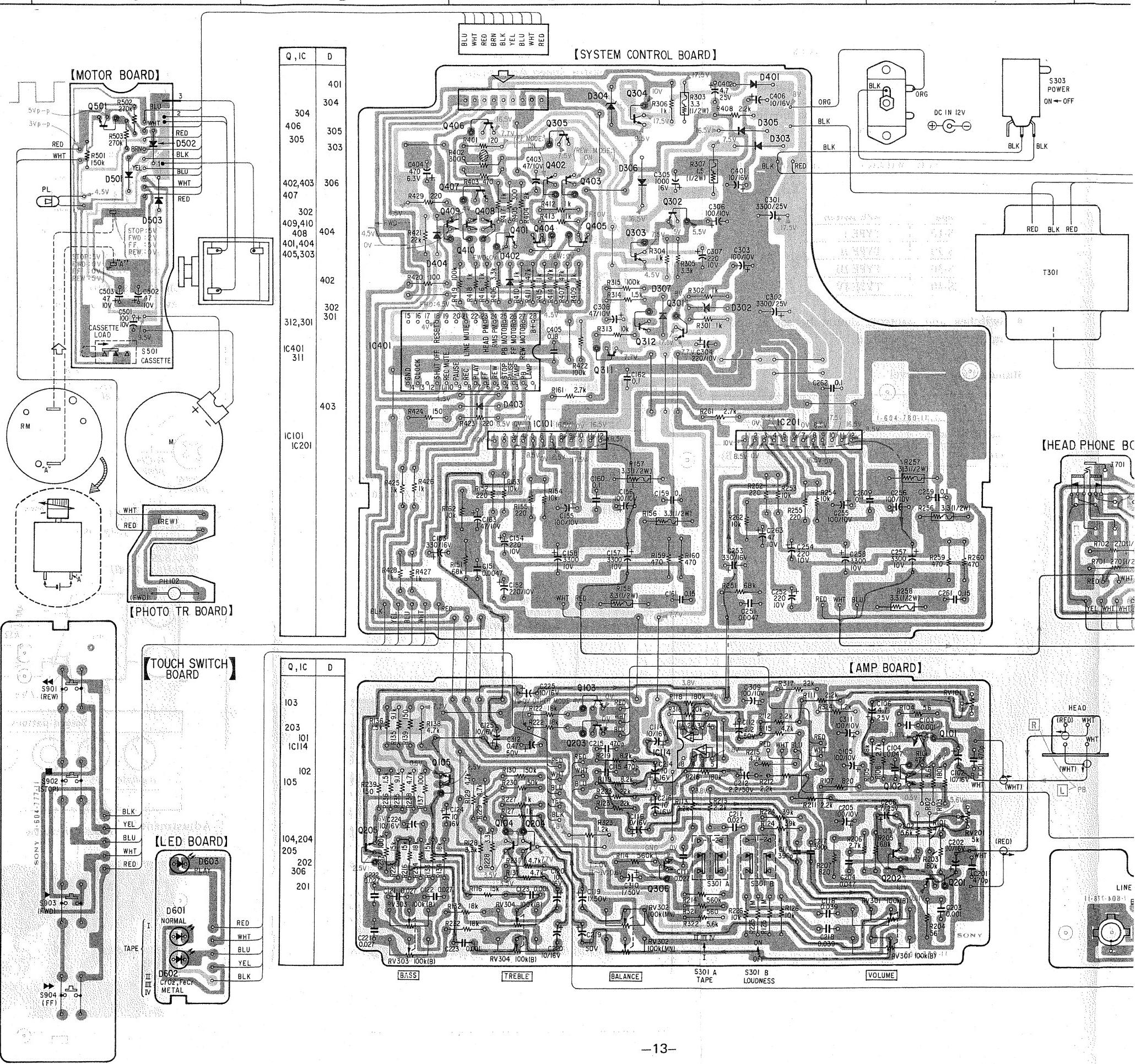
— record/playback board —



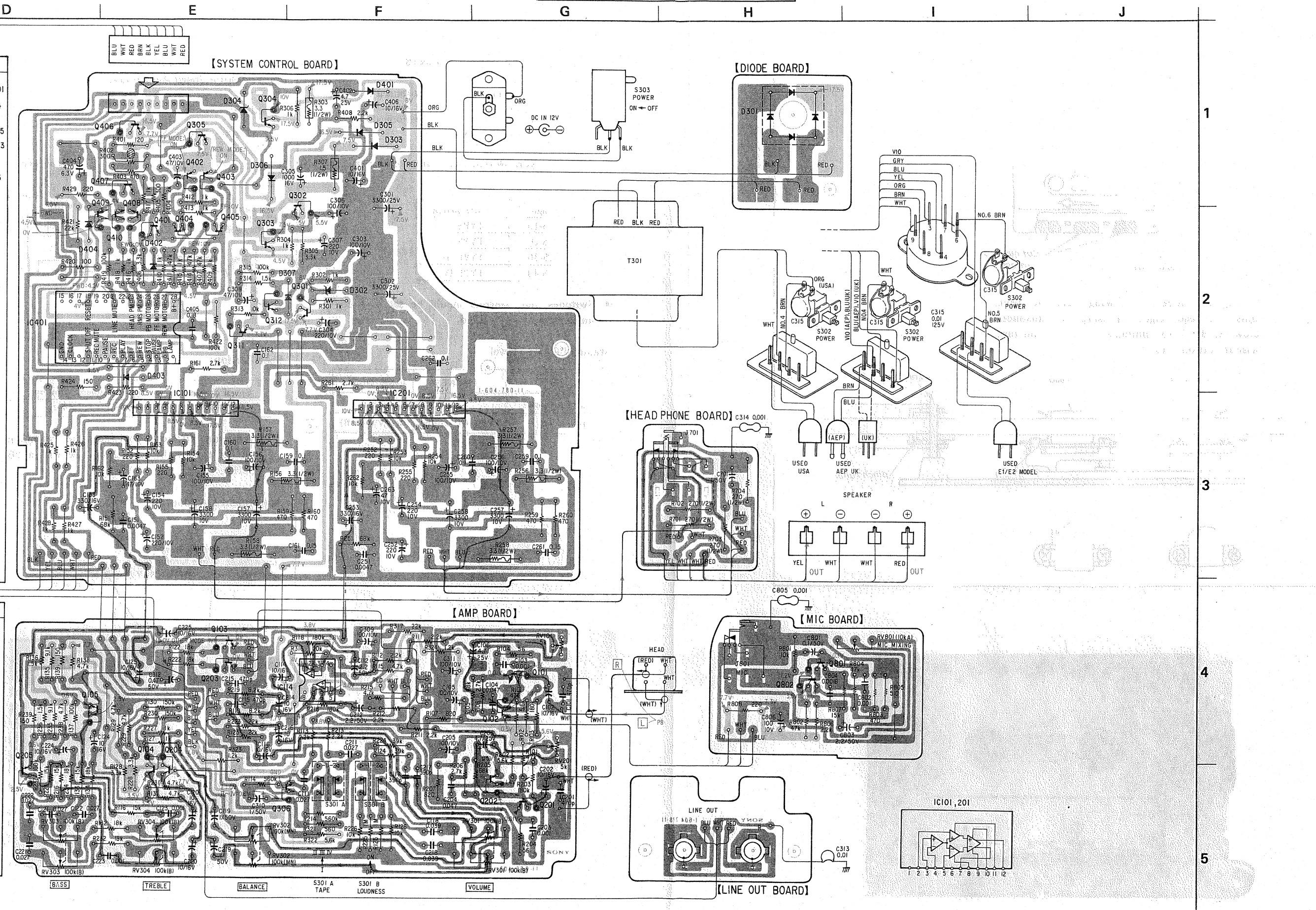
4-1. MOUNTING DIAGRAM

— Conductor Side —

- See page 18 for semiconductor lead layouts.

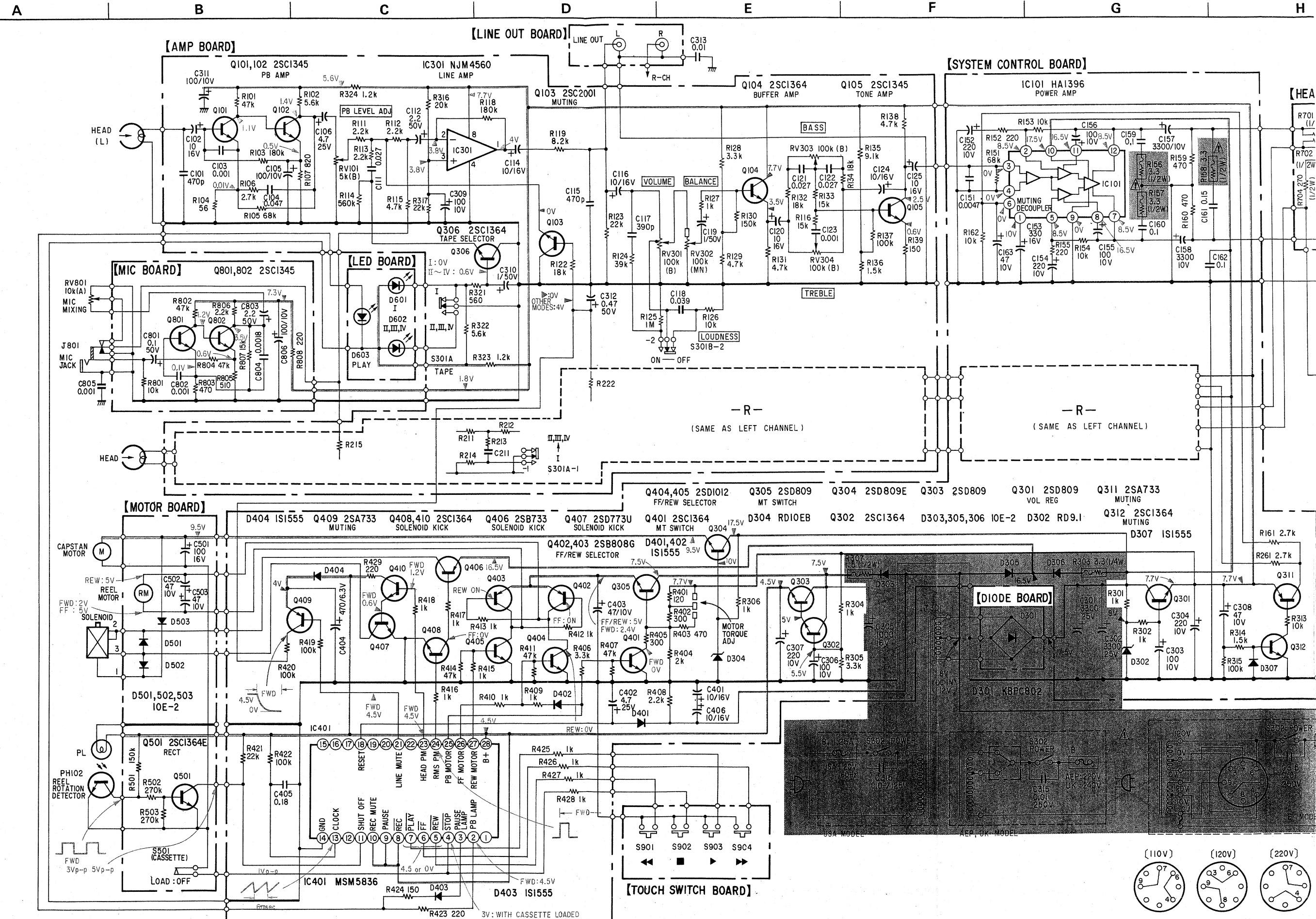


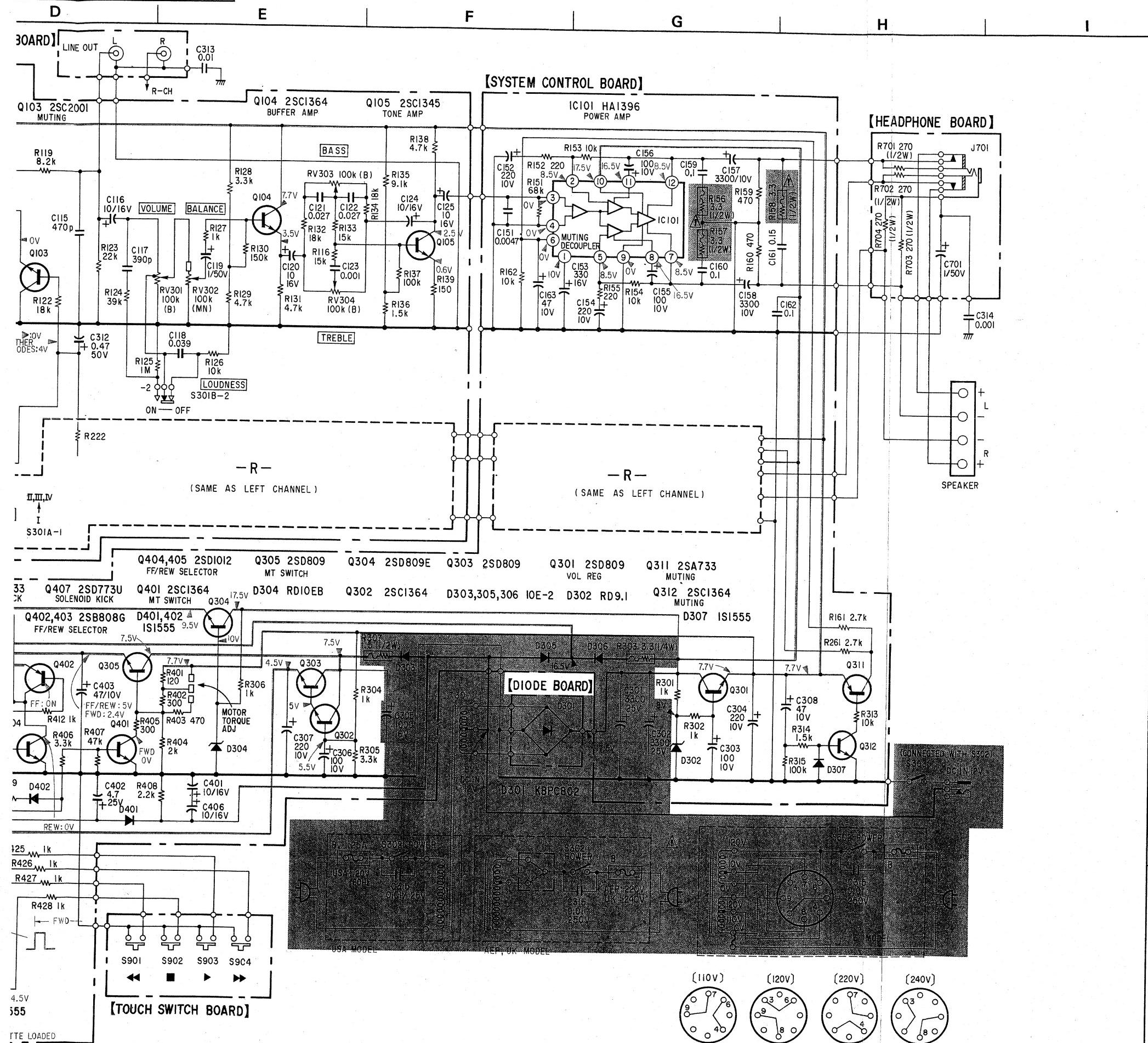
TC-PB10 TC-PB10



4-2. SCHEMATIC DIAGRAM

TC-PB10 TC-PB10



**Note:**

- Components for right channel have same values as for left channel. Reference numbers are coded from 200.
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\mu\text{F}$ 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, $1/4\text{W}$ unless otherwise noted. $\text{k}\Omega : 1000\Omega$, $\text{M}\Omega : 1000\text{k}\Omega$
- WWW : fusible resistor.
- --- : B+ bus.
- Readings are taken under no-signal conditions.
- Voltage variations may be noted due to normal production tolerances.
- Voltages are dc with respect to ground unless otherwise noted.
- Switch

Ref. No.	Description	Position
S301	TAPE	TAPE I/LOUDNESS OFF
S302	POWER	---
S303	(DC POWER SW)	---
S501	(CASSETTE)	OFF
S901	REW	OFF
S902	STOP	OFF
S903	FWD	OFF
S904	FF	OFF

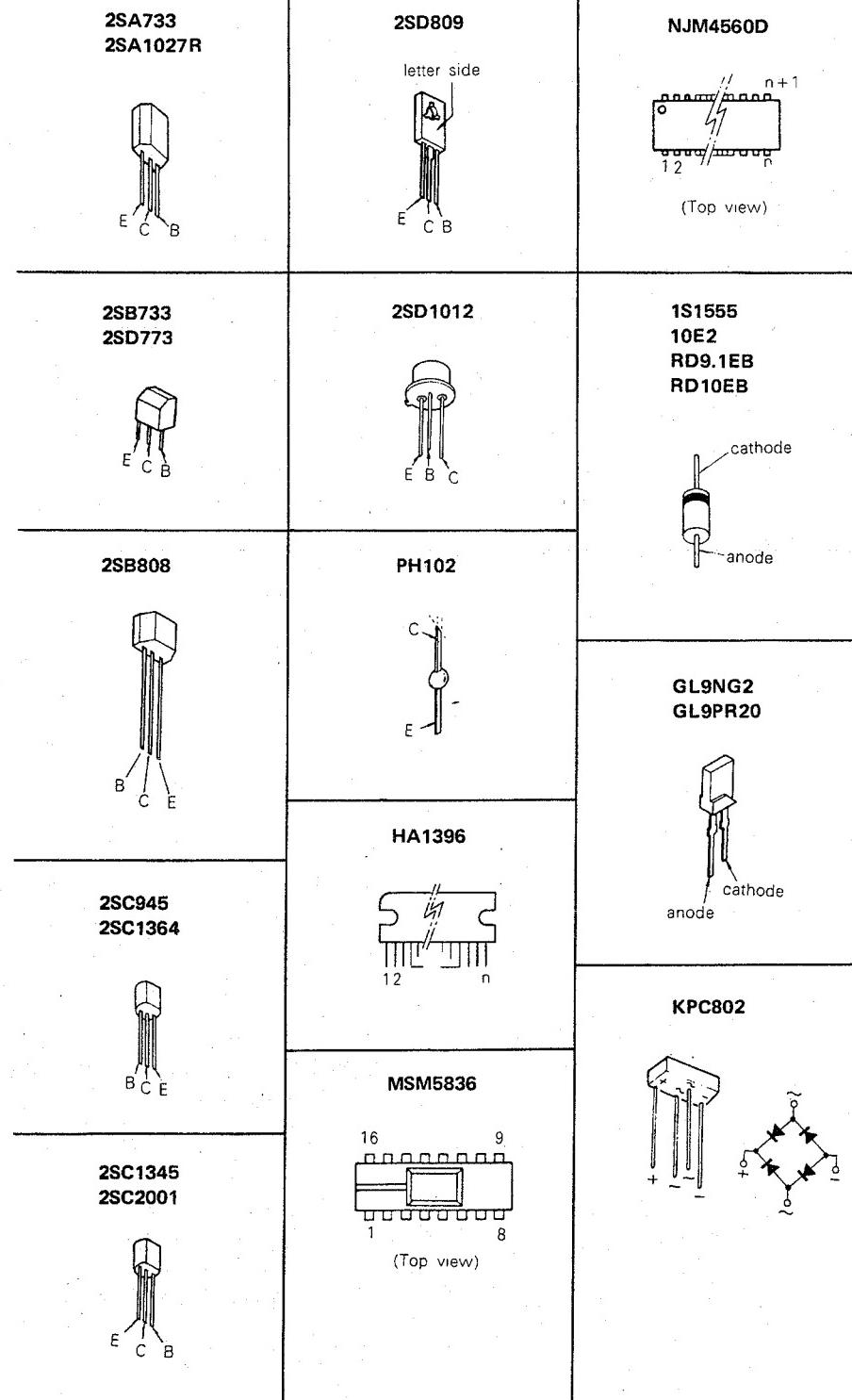
Note: Voltages are measured with a VOM (50k Ω /V).

Note: The components identified by shading and mark \triangle are critical for safety. Replace only with part number specified.

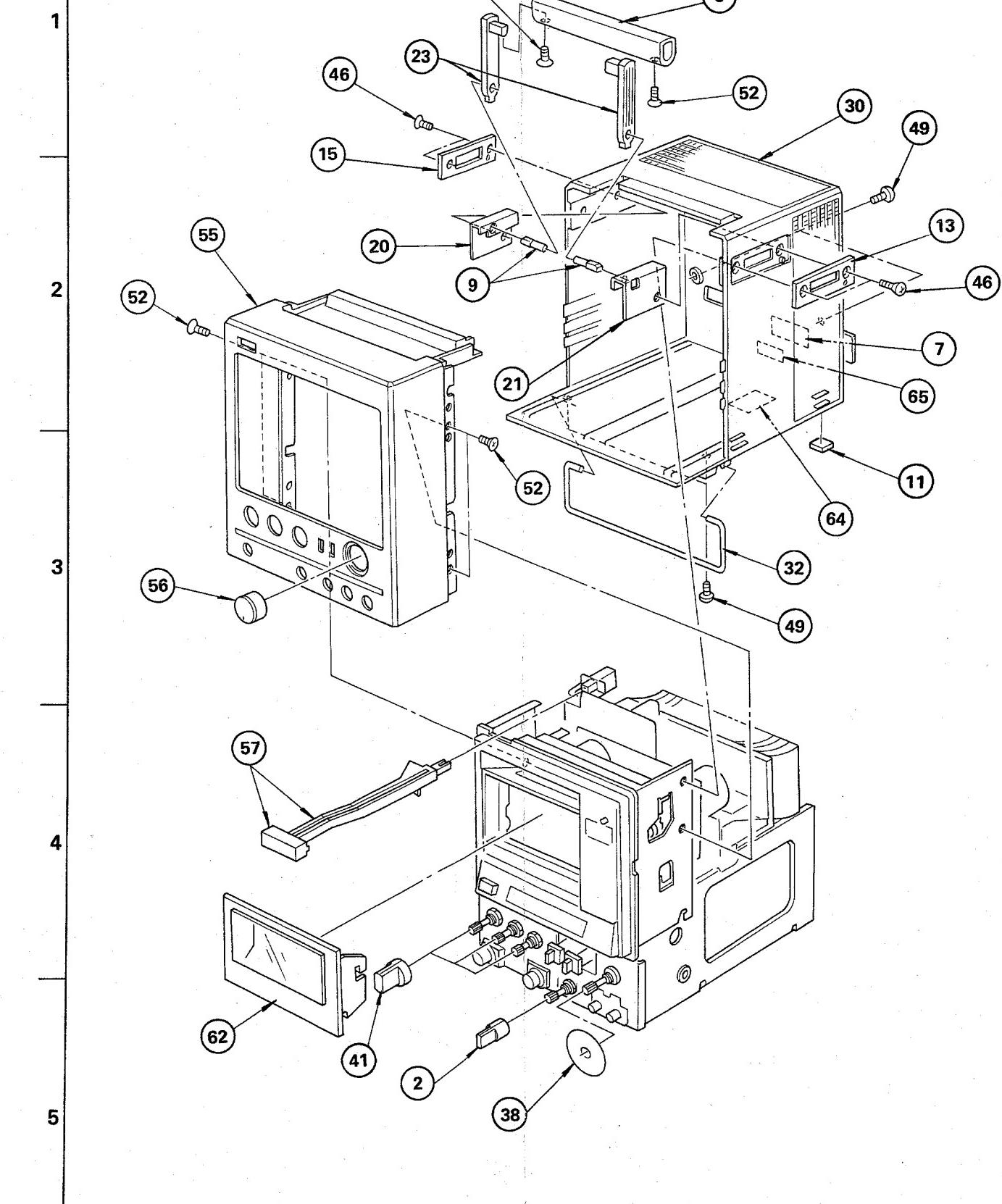
SECTION 5
EXPLODED VIEWS AND PARTS LIST

A B C D

SEMICONDUCTOR LEAD LAYOUTS



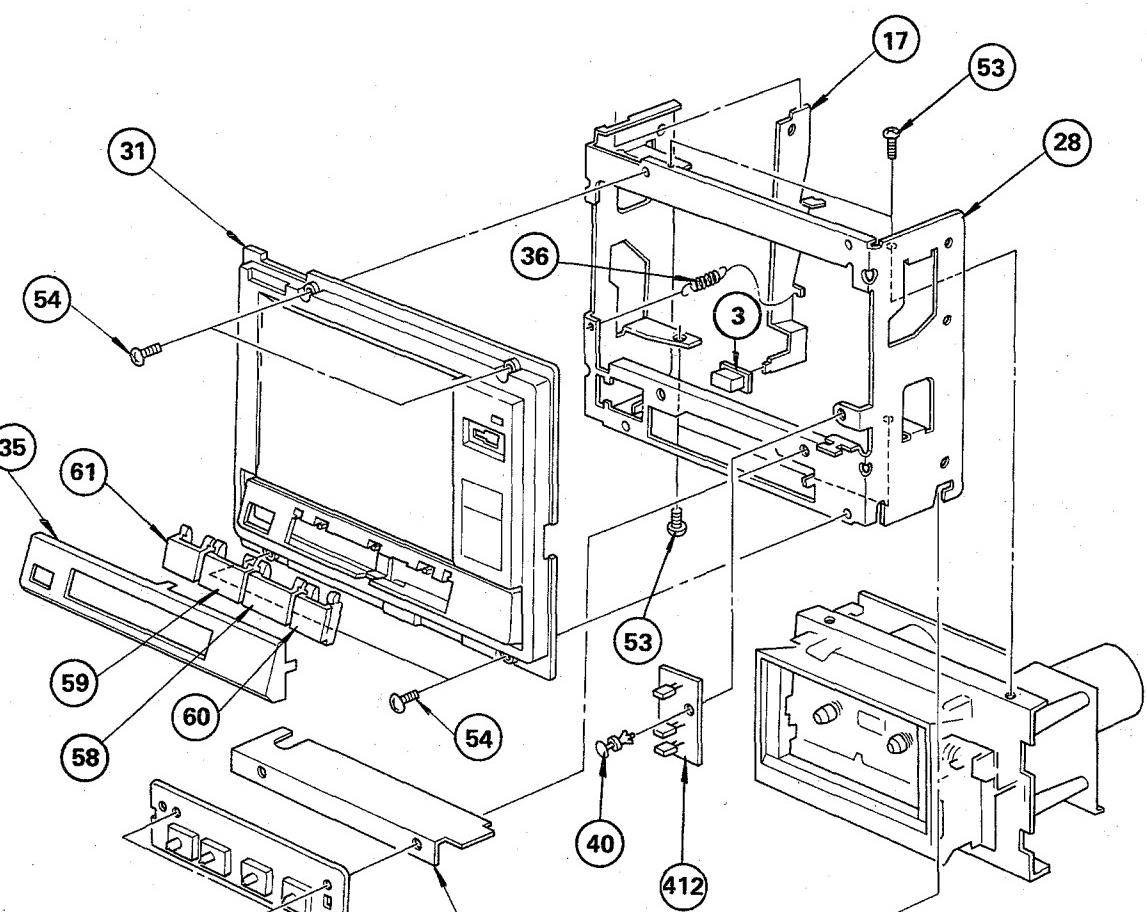
5-1.



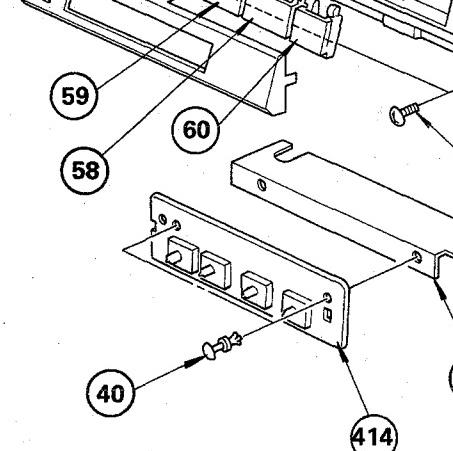
A B C D

5-2.

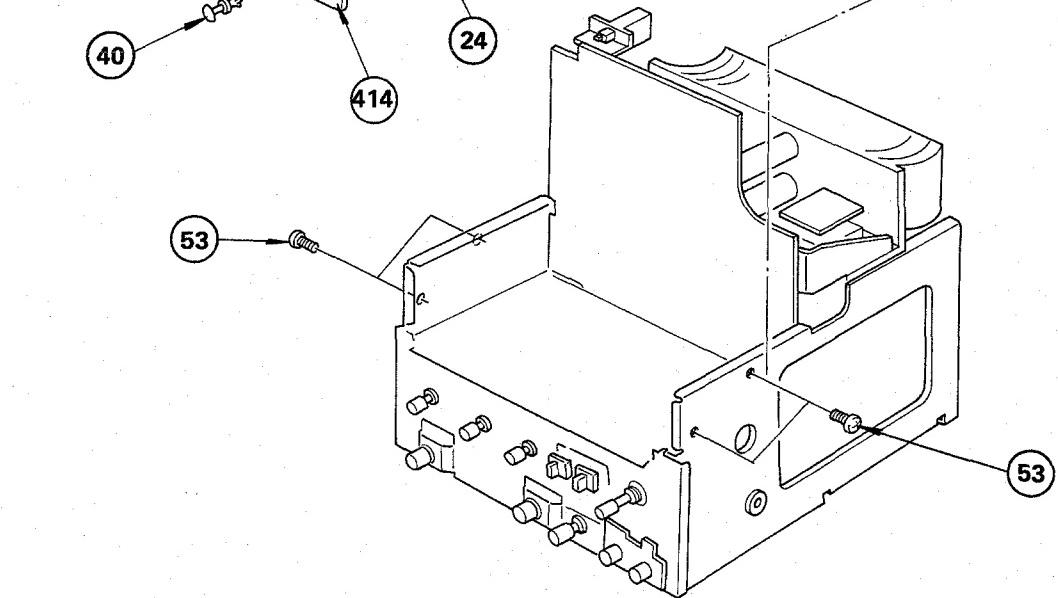
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2

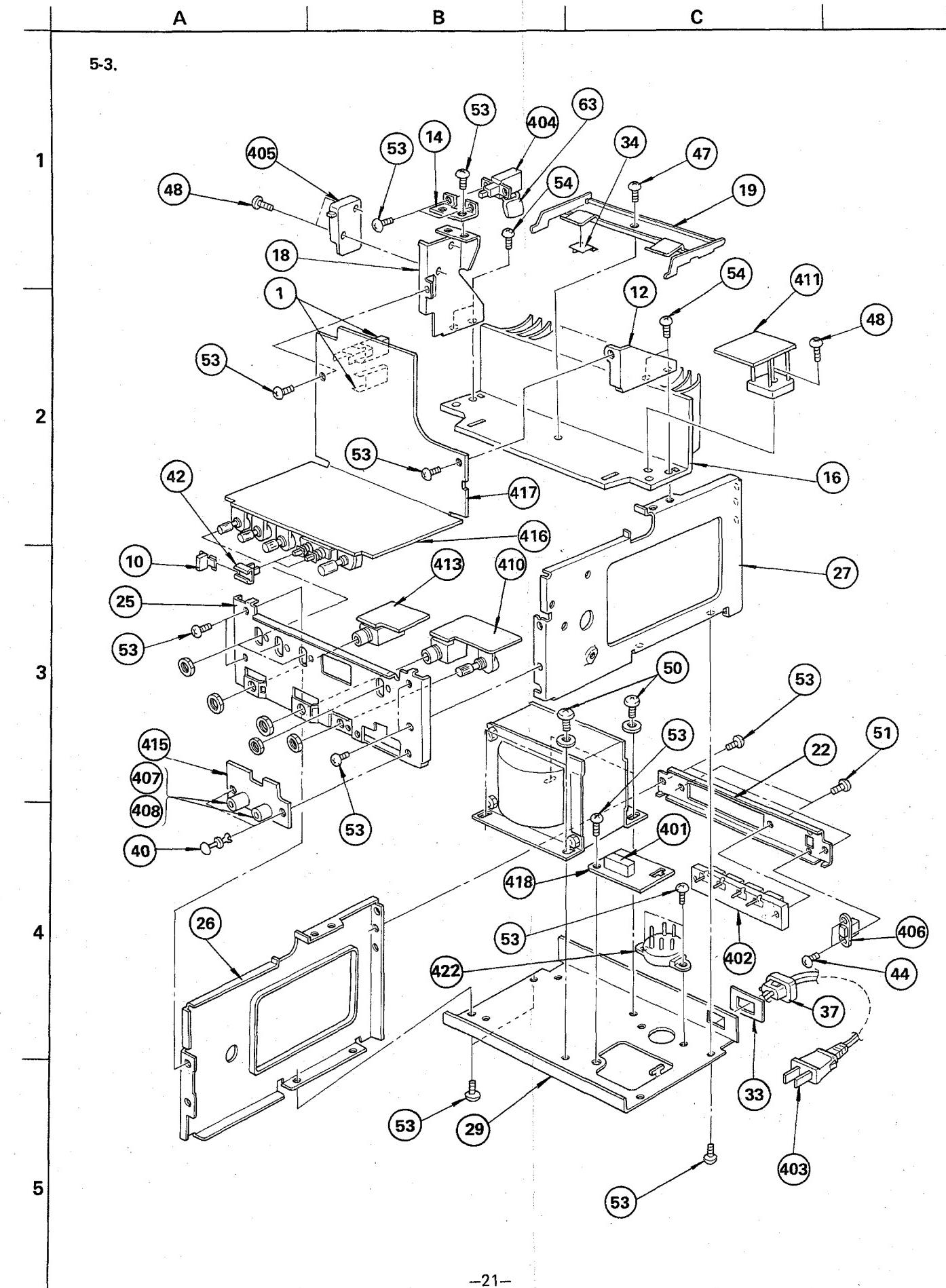


3



4

5



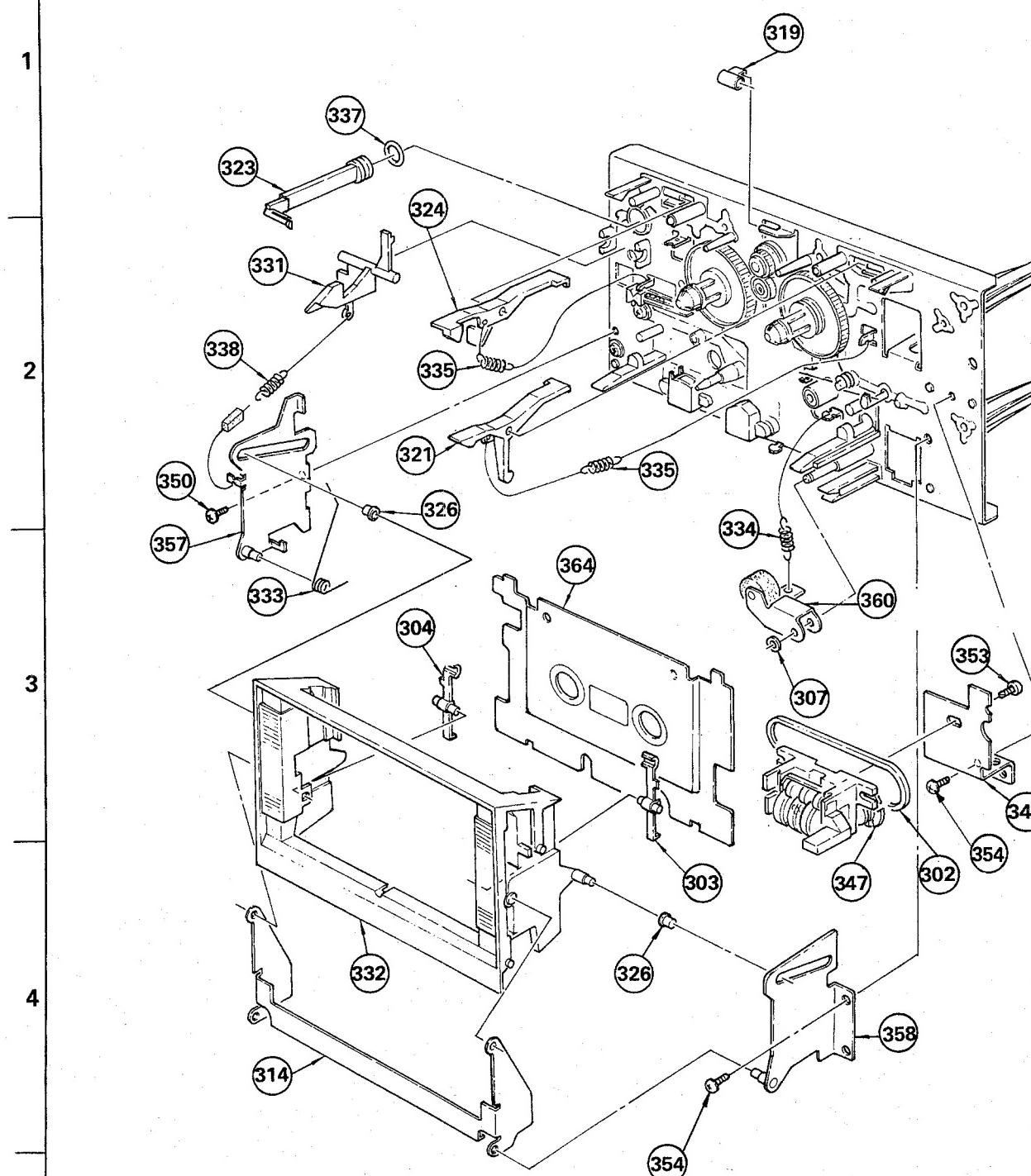
A

B

C

D

5-4.



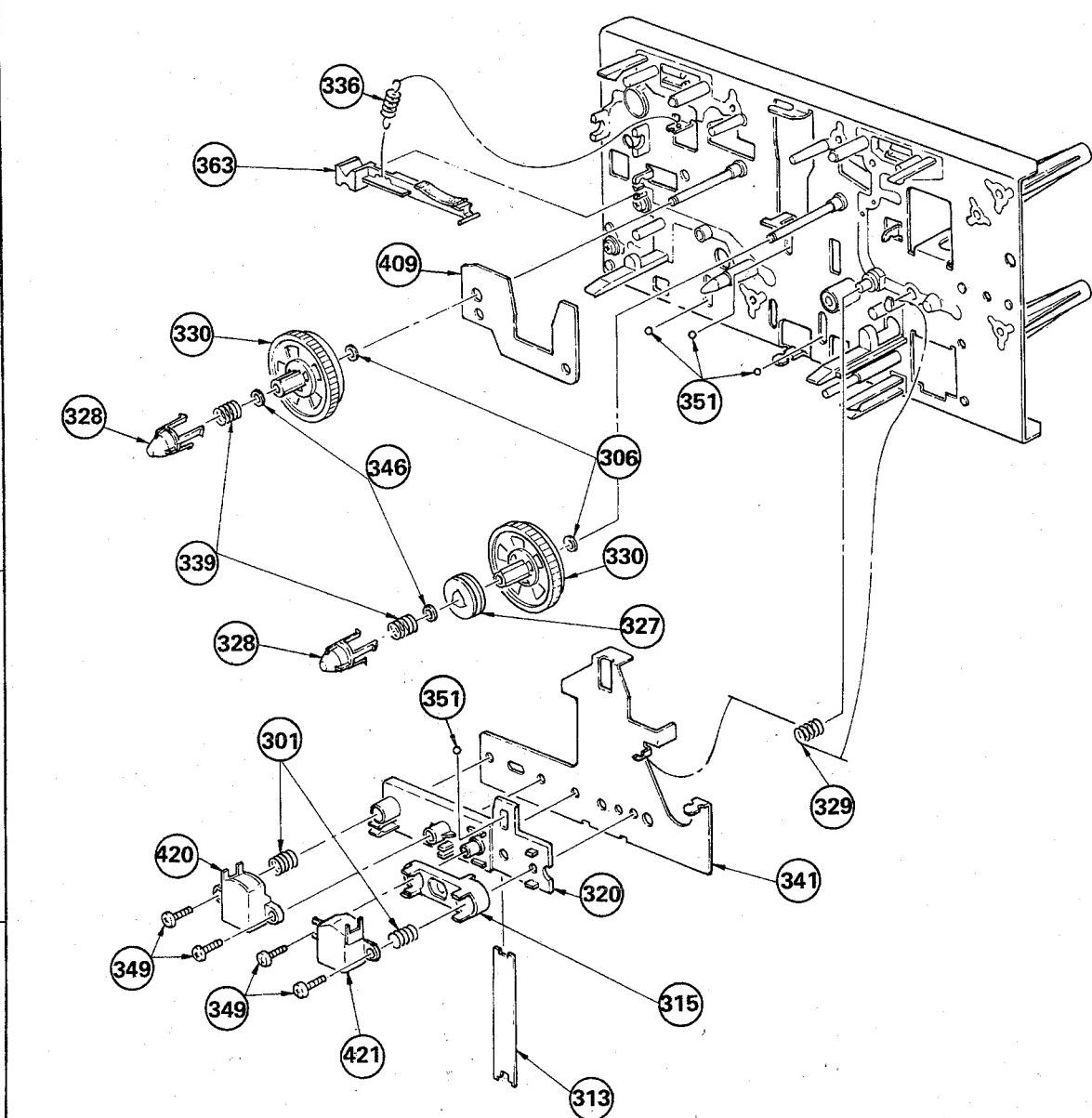
A

B

C

D

5-5.



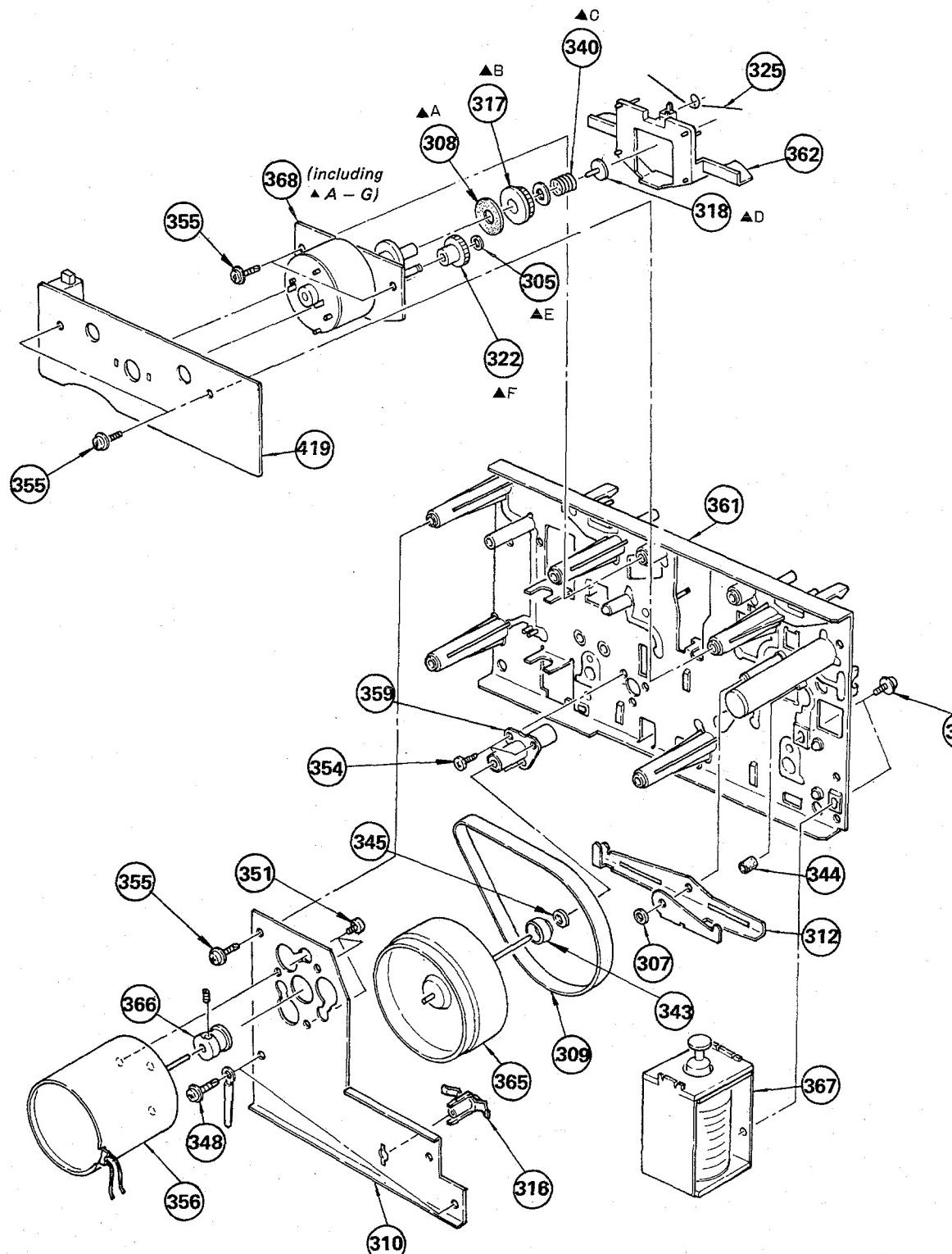
A

B

C

5-6.

1



2

3

4

5

GENERAL SECTION

No.	Part No.	Description
1	4;3-567-307-00	HEAT SINK (35)
2	3-572-404-21	KNOB, BIAS
3	3-573-503-11	BUTTON, EJECT
4	
5	
6	
7	3-579-502-00	LABEL, MODEL NUMBER...(US)
7	3-579-504-00	LABEL, MODEL NUMBER...(E)
7	3-579-505-00	LABEL, MODEL NUMBER...(AEP)
7	3-579-506-00	LABEL, MODEL NUMBER...(UK)
8	3-579-507-00	HANDLE
9	3-579-508-00	STOPPER, HANDLE
10	3-579-512-00	BUTTON, FUNCTION
11	3-579-516-00	FOOT
12	4;3-579-517-00	RETAINER (R), PC BOARD
13	3-579-518-00	RETAINER (R), SPEAKER
14	4;3-579-519-00	BRACKET, SWITCH, POWER
15	3-579-520-00	RETAINER (L), SPEAKER
16	4;3-579-525-00	HEAT SINK
17	4;3-579-526-00	LEVER, EJECT
18	4;3-579-527-00	RETAINER (L), PC BOARD
19	4;3-579-528-00	RETAINER, IC
20	4;3-579-529-00	RETAINER (L), HANDLE
21	4;3-579-530-00	RETAINER (R), HANDLE
22	4;3-579-531-00	BRACKET, TERMINAL, SPEAKER
23	3-579-532-00	PLATE, SIDE, HANDLE
24	4;3-579-533-11	COVER, MD ...(US)
24	4;3-579-533-01	COVER, MD ...(E,AEP,UK)
25	4;3-579-535-00	CHASSIS, FRONT
26	4;3-579-536-00	CHASSIS (L), SIDE
27	4;3-579-537-00	CHASSIS (R), SIDE
28	4;3-579-538-00	CHASSIS, MD
29	4;3-579-539-00	CHASSIS, POWER
30	3-579-540-01	CABINET ...(US,AEP,UK)
30	3-579-540-11	CABINET ...(E)
31	3-579-541-00	ESCUTCHEON, MD
32	3-579-543-00	FOOT, ADJUSTMENT
33	4;3-579-544-00	PLATE, BLIND
34	4;3-579-545-00	PLATE, GROUND, IC
35	3-579-546-00	PLATE, ORNAMENTAL, MD BUTTON
36	4;3-642-752-00	SPRING, TENSION
37	3-703-244-00	BUSHING, CORD
38	3-831-441-XX	CLOTH, BLIND
39	
40	4-812-134-11	RIVET NYLON, 3.5

NOTE:

Items with no part number and no description are not stocked because they are seldom required for routine service.

Items marked "▲" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Due to standardization, parts with part numbers ($\Delta-\Delta\Delta-\Delta\Delta-\Delta\Delta-\Delta\Delta-X$ or $\Delta-\Delta\Delta\Delta-\Delta\Delta\Delta-X$) may be different from those used in the set.

CAPACITORS:

All capacitors are in μ F. Common capacitors are omitted. Refer to the following lists for their part numbers.
MF: μ F, PF: μ F.

RESISTORS

All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

F : nonflammable

COILS

MMH : mH, UH : μ H

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

MECHANISM SECTION

No.	Part No.	Description
301	3-481-272-00	SPRING, COMPRESSION
302	3-530-181-XX	BELT, DETECTING
303	3-555-113-00	SPRING (R)
304	3-555-114-00	SPRING (L)
305	3-558-708-01	WASHER, STOPPER
306	3-558-708-11	WASHER, STOPPER
307	3-558-708-21	WASHER, STOPPER
308	3-564-027-11	FELT, LIMITER
309	3-564-319-00	BELT, CAPSTAN
310	3-575-302-00	RETAINER, THRUST
311	
312	3-575-307-00	LEVER, FWD
313	3-575-312-00	SPRING
314	3-575-314-00	LEVER, FULCRUM, HOLDER
315	3-575-320-00	BASE, ADJUSTMENT, HEAD
316	3-575-321-00	RETAINER, THRUST, CAPSTAN
317	3-575-324-00	GEAR, LIMITER
318	3-575-327-00	STOPPER
319	3-575-328-00	HOLDER, LAMP
320	3-575-330-00	BRACKET, HEAD
321	3-575-331-00	LEVER, DETECTION, HALF
322	3-575-332-00	GEAR, FR
323	3-575-333-00	PISTON
324	3-575-334-00	LEVER, DETECTION, REC
325	3-575-345-00	SPRING
326	3-575-348-00	ROLLER, GUIDE, THREADING
327	3-575-349-00	PULLEY, CB
328	3-575-350-00	CLAW, REEL TABLE
329	3-575-351-00	SPRING
330	3-575-353-00	TABLE, REEL
331	3-575-354-00	LEVER, LOCK
332	3-575-355-06	HOLDER, CASSETTE
333	3-575-356-00	SPRING
334	3-575-357-00	SPRING, TENSION
335	3-575-358-00	SPRING, TENSION
336	3-575-359-00	SPRING, TENSION
337	3-575-360-00	RING, O
338	3-575-364-00	SPRING, TENSION
339	3-575-365-00	SPRING, COMPRESSION
340	3-575-368-00	SPRING, COMPRESSION
341	3-575-383-00	CHASSIS, HEAD
342	3-575-395-00	BRACKET, COUNTER
343	3-576-734-00	WASHER, CAPSTAN
344	3-652-612-11	CUSHION (B)
345	3-701-438-21	WASHER

MECHANISM SECTION

No.	Part No.	Description
346	3-701-439-21	WASHER
347	0-489-436-00	COUNTER
348	7-621-259-15	SCREW +P 2.6X3
349	7-621-772-70	SCREW +B 2X14
350	7-621-775-10	SCREW +B 2.6X4
351	7-671-112-11	BALL, STEEL
352	7-682-949-01	SCREW +PSW 3X10
353	7-685-534-29	SCREW +BTP 2.6X8 TYPE2 N-S
354	7-685-861-01	SCREW +BVTT 2.6X5 (S)
355	7-687-246-21	SCREW, TOTSU PTPWH 3X8, TYPE2
356	X-3575-311-0	MOTOR, DC (DNE-4100A)
357	X-3575-301-0	PLATE (A) ASSY, HOLDER FULCRUM
358	X-3575-302-0	PLATE (B) ASSY, HOLDER FULCRUM
359	X-3575-303-0	METAL ASSY, CAPSTAN
360	X-3575-304-0	PINCH LEVER (T) ASSY
361	X-3575-306-0	CHASSIS ASSY, MECHANISM
362	X-3575-309-0	PLATE ASSY, BRAKE
363	X-3575-310-0	LEVER ASSY, TENSION, BACK
364	X-3575-314-0	PLATE ASSY, ORNAMENTAL
365	X-3575-318-0	FLYWHEEL (D) ASSY
366	X-3575-328-1	PULLEY, MOTOR
367	X-3575-329-0	SOLENOID ASSY
368	X-3575-313-0	MOTOR ASSY, REEL

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked "●" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:

- All capacitors are in μF . Common capacitors are omitted. Refer to the following lists for their part numbers.
- MF: μF , PF: μF .

RESISTORS

- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.

• F : nonflammable

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

COILS

• MMH : mH, UH : μH

ELECTRICAL PARTS

Ref.No.	Part No.	Description
401	△.1-532-519-00	BREAKER, CIRCUIT...(US)
401	△.1-532-539-00	BREAKER, CIRCUIT...(AEP,UK)
401	△.1-532-541-00	BREAKER, CIRCUIT...(E)
402	1-536-605-00	TERMINAL BOARD
403	△.1-534-986-XX	CORD, POWER...(US)
403	△.1-534-817-XX	CORD, POWER...(AEP)
403	△.1-551-473-32	CORD, POWER...(E)
403	△.1-551-963-00	CORD, POWER...(UK)
406	△.1-507-447-XX	JACK, EXT. POWER SUPPLY
407	1-507-567-31	JACK, PIN 1P (LINE OUT L)
408	1-507-567-41	JACK, PIN 1P (LINE OUT R)
409	△.1-603-823-00	PC BOARD, PHOTO
410	△.1-604-773-00	PC BOARD, MIC
411	△.1-604-774-00	PC BOARD, RECTIFICATION
412	△.1-604-775-00	PC BOARD, LED
413	△.1-604-776-00	PC BOARD, HEADPHONE
414	△.1-604-777-00	PC BOARD, TACT SWITCH
415	△.1-604-778-00	PC BOARD, PIN JACK
416	△.A-2095-402-A	MOUNDED PCB, PRE AMPLIFIER
417	△.A-2017-013-A	MOUNDED PCB, SYSTEM CONTROL
418	△.1-604-781-00	PC BOARD, BREAKER
419	△.1-604-782-00	PC BOARD, MOTOR
420	8-825-505-20	GUIDE, TAPE
421	8-829-373-50	HEAD, REC/PB (PP181-3602E)
422	△.1-526-576-00	SELECTOR, VOLT...,(E)
C301	△.1-123-500-51	ELECT 3300MF 20% 25V
C302	△.1-123-500-51	ELECT 3300MF 20% 25V
C305	△.1-123-488-00	ELECT 1000MF 20% 16V
C315	△.1-161-749-00	CAP, CERAMIC 0.01MF 125V...(US)
C315	△.1-130-455-00	CAP, FILM 0.01MF 250V...(UK,AEP,E)
C401	△.1-123-316-00	ELECT 10MF 20% 16V
C406	△.1-123-316-00	ELECT 10MF 20% 16V
D301	△.1-806-233-00	DIODE (BRIDGE) KBPC802
D302	8-719-191-07	DIODE RD9.1E-B
D303	△.8-719-200-02	DIODE 10E-2
D304	8-719-110-07	DIODE RD10E-B
D305	△.8-719-200-02	DIODE 10E-2
D306	△.8-719-200-02	DIODE 10E-2
D307	8-719-815-55	DIODE 1S1555
D401	8-719-815-55	DIODE 1S1555
D402	8-719-815-55	DIODE 1S1555
D403	8-719-815-55	DIODE 1S1555
D404	8-719-815-55	DIODE 1S1555
D501	8-719-200-02	DIODE 10E-2
D502	8-719-200-02	DIODE 10E-2
D503	8-719-200-02	DIODE 10E-2
D601	8-719-900-92	DIODE GL-9PR20

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D602	8-719-900-92	DIODE GL-9PR20
D603	8-719-909-20	DIODE GL-9NG2
IC101	8-759-313-96	IC HA1396
IC201	8-759-313-96	IC HA1396
IC301	8-759-745-60	IC NJM4560D
IC401	8-759-908-36	IC MSM5836
J701	1-507-648-00	JACK (HEAD PHONE)
J801	1-507-745-00	JACK, LARGE TYPE
PL	1-518-313-00	LAMP, PILOT
Q101	8-729-334-58	TRANSISTOR 2SC1345
Q102	8-729-334-58	TRANSISTOR 2SC1345
Q103	8-729-100-13	TRANSISTOR 2SC2001
Q104	8-729-663-47	TRANSISTOR 2SC1364
Q105	8-729-663-47	TRANSISTOR 2SC1364
Q201	8-729-334-58	TRANSISTOR 2SC1345
Q202	8-729-334-58	TRANSISTOR 2SC1345
Q203	8-729-100-13	TRANSISTOR 2SC2001
Q204	8-729-663-47	TRANSISTOR 2SC1364
Q205	8-729-663-47	TRANSISTOR 2SC1364
Q301	8-729-180-93	TRANSISTOR 2SD809
Q302	8-729-663-47	TRANSISTOR 2SC1364
Q303	8-729-180-93	TRANSISTOR 2SD809
Q304	8-729-180-93	TRANSISTOR 2SD809
Q305	8-729-180-93	TRANSISTOR 2SD809
Q306	8-729-663-47	TRANSISTOR 2SC1364
Q311	8-729-612-77	TRANSISTOR 2SA1027R
Q312	8-729-663-47	TRANSISTOR 2SC1364
Q401	8-729-663-47	TRANSISTOR 2SC1364
Q402	8-729-880-82	TRANSISTOR 2SB808
Q403	8-729-880-82	TRANSISTOR 2SB808
Q404	8-729-801-22	TRANSISTOR 2SD1012
Q405	8-729-801-22	TRANSISTOR 2SD1012
Q406	8-729-113-34	TRANSISTOR 2SB733
Q407	8-729-177-32	TRANSISTOR 2SD773
Q408	8-729-663-47	TRANSISTOR 2SC1364
Q409	8-729-612-77	TRANSISTOR 2SA1027R
Q410	8-729-663-47	TRANSISTOR 2SC1364
Q501	8-729-663-47	TRANSISTOR 2SC1364
Q801	8-729-334-58	TRANSISTOR 2SC1345
Q802	8-729-334-58	TRANSISTOR 2SC1345
Q803	8-729-101-02	TRANSISTOR PH102
R156	△.1-212-946-00	FUSIBLE 3.3 5% 1/2W F
R157	△.1-212-946-00	FUSIBLE 3.3 5% 1/2W F
R158	△.1-247-186-00	CARBON 3.3 5% 1/2W F
R256	△.1-212-946-00	FUSIBLE 3.3 5% 1/2W F
R257	△.1-212-946-00	FUSIBLE 3.3 5% 1/2W F
R258	△.1-247-186-00	CARBON 3.3 5% 1/2W F
R303	△.1-217-381-00	FUSIBLE 3.3 5% 1/4W F
R307	△.1-212-938-00	FUSIBLE 1.5 5% 1/2W F

ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV101	1-226-430-00	RES, ADJ, CARBON 5K
RV201	1-226-430-00	RES, ADJ, CARBON 5K
RV301	1-228-263-00	RES, VAR, CARBON 100K/100K(VOLUME)
RV302	1-228-278-00	RES, VAR, CARBON 100K/100K(BALANCE)
RV303	1-228-277-00	RES, VAR, CARBON 100K/100K(BASS)
RV304	1-228-277-00	RES, VAR, CARBON 100K/100K(TREBLE)
RV801	1-228-264-00	RES, VAR, CARBON 10K (MIC MIX)

Ref.No.	Part No.	Description
S301	1-553-740-00	SWITCH, PUSH
S302	△.1-553-319-00	SWITCH, PUSH (AC POWER)...(US)
S302	△.1-553-318-00	SWITCH, PUSH (AC POWER)...(UK,AEP,E)
S303	△.1-553-741-00	SWITCH, MICRO
S501	1-552-532-00	SWITCH, PUSH

T301	△.1-446-987-00	TRANSFORMER, POWER...(US)
T301	△.1-446-988-00	TRANSFORMER, POWER...(AEP,UK)
T301	△.1-446-989-00	TRANSFORMER, POWER...(E)

NOTE:
 Items with no part number and no description are not stocked because they are seldom required for routine service.
 Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 Due to standardization, parts with part numbers (△-△△-△△-XX or △-△△△-△△-X) may be different from those used in the set.

COILS
 MMH : mH, UH : μH

CAPACITORS:
 All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers.
 MF:μF, PF:μμF.
 RESISTORS
 All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
 F : nonflammable

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

COILS
 MMH : mH, UH : μH

TC-PB10

TC-PB10

ELECTROLYTIC CAPACITORS

CAP. (μ F)	RATING → : Use the high voltage rated one.					
	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	25 VOLT. PART No.	35 VOLT. PART No.	50 VOLT. PART No.
0.47					→	1-121-726-00
1.0					→	1-121-391-00
2.2					→	1-121-450-00
3.3	→	→	→	1-121-392-00	→	1-121-393-00
4.7	→	→	→	1-121-395-00	→	1-121-396-00
10	→	→	→	1-121-651-00	→	1-121-398-00
22	→	→	→	1-121-479-00	1-121-480-00	1-121-662-00
33	→	→	→	1-121-403-00	1-121-404-00	1-121-652-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-419-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000	—	1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	—
3300	1-121-661-00	1-123-075-00	1-123-071-00	—	—	—

CAP. (μ F)	100 VOLT.		160 VOLT.		250 VOLT.		350 VOLT.	
	PART No.	PART No.	PART No.	PART No.				
0.47	—	—	—	—	—	—	—	—
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00	—	—	—	—
2.2	1-123-250-00	1-123-026-00	—	1-123-028-00	—	—	—	—
3.3	1-121-995-00	1-123-255-00	1-121-246-00	1-123-004-00	1-123-006-00	—	—	—
4.7	—	—	—	1-121-759-00	1-123-007-00	—	—	—
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00	—	—	—	—
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00	—	—	—	—
33	1-121-997-00	1-121-757-00	—	—	—	—	—	—
47	1-123-251-00	1-121-919-00	—	—	—	—	—	—
100	1-123-084-00	—	—	—	—	—	—	—

CERAMIC CAPACITORS

CAP. (pF)	RATING						CAP. (pF)
	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.	CAP. (pF)	50 VOLT. PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

0.001 μ F = 1,000pF

CERAMIC (SEMICONDUCTOR) CAPACITORS

CAP. (μ F)	RATING → : Use the high voltage rated one.					
	25 VOLT. PART No.	50 VOLT. PART No.	CAP. (μ F)	25 VOLT. PART No.	50 VOLT. PART No.	
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00	
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00	
0.0015	1-161-041-00	0.027	1-161-018-00	1-161-056-00		
0.0018	1-161-042-00	0.033	1-161-019-00	1-161-057-00		
0.0022	1-161-043-00	0.039	1-161-010-00	1-161-058-00		
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00	
0.0033	→	1-161-045-00	0.056	→	1-161-060-00	
0.0039	→	1-161-046-00	0.068	→	1-161-061-00	
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00	
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00	
0.0068	→	1-161-049-00				
0.0082	1-161-012-00	1-161-050-00				
0.01	1-161-013-00	1-161-051-00				
0.012	→	1-161-052-00				
0.015	1-161-015-00	1-161-053-00				

MYLAR CAPACITORS